

IN THE CLAIMS

Please amend the claims and add new claims 16-23 as follows:

1. (currently amended) A quartz glass article [~~cylinder~~] for producing an optical component, the quartz glass article comprising: a quartz glass cylinder having an inner bore [~~which is~~], the inner bore being mechanically treated to a final dimension and [~~provided with~~] having an etched structure [~~due to~~] wherein the etched structure is produced using an etching treatment following the mechanical treatment, [characterized in that] wherein the etched structure has [~~comprises~~] cracks therein each having a depth of not more than 2.0 mm and a width of not more than 100 μm .
2. (currently amended) The quartz glass article [~~cylinder~~] according to claim 1, [~~characterized in that the etched structure comprises cracks having a~~] and the depths of the cracks being not more than 1.0 mm and [~~a~~] the widths of the cracks being not more than 50 μm .
3. (currently amended) The quartz glass article [~~cylinder~~] according to claim 1, [~~characterized in that the etched structure comprises cracks having a~~] and the depths of the cracks being not more than 0.5 mm and [~~a~~] the widths of the cracks being not more than 20 μm .

4. (currently amended) The quartz glass article ~~[cylinder]~~ according to claim 1,
~~[characterized in that the etched structure comprises cracks having a]~~ and the depths of the
cracks being at least 30 μm and [a] the widths of the cracks being at least 5 μm .
5. (currently amended) The quartz glass article ~~[cylinder]~~ according to claim 1,
~~[characterized by]~~ wherein the quartz glass cylinder has an outer diameter of at least 150 mm.
6. (currently amended) A method for producing [a] the quartz glass article ~~[cylinder~~
~~comprising an inner bore]~~ according to claim 1, ~~in that the inner bore of the quartz glass~~
~~cylinder is mechanically treated to a final dimension and subsequently subjected to an etching~~
~~treatment], the method comprising the steps of:~~
- mechanically treating the inner bore to the final dimension; and
- applying an etching treatment to the inner bore,
- wherein the step of mechanically treating the inner bore [characterized in that the
~~mechanical treatment]~~ comprises a plurality of [subsequent] removal processes each with a
successively smaller removal depth,
- wherein the inner bore ~~comprising~~ has subsurface cracks of a depth of not more than 2
mm after the last removal process, and
- wherein that the inner bore is subsequently subjected to the [an] etching treatment so as

to produce ~~[such that]~~ an etching removal with a depth of not more than 50 μm ~~[is achieved]~~.

7. (currently amended) The method according to claim 6, ~~[characterized in that]~~ wherein the etching treatment yields an etching removal with a depth of not more than 25 μm .

8. (currently amended) The method according to claim 6, ~~[characterized in that]~~ wherein the etching treatment yields an etching removal with a depth of not more than 10 μm .

9. (currently amended) The method according to claim 6, ~~[characterized in that]~~ wherein the etching treatment yields an etching removal with a depth of at least 2.5 μm .

10. (currently amended) The method according to claim 6, ~~[characterized in that]~~ wherein the etching treatment includes a first etching step in ~~[an]~~ a first etching solution containing hydrofluoric acid, and a second etching step in ~~[an]~~ a second etching solution containing nitric acid.

11. (currently amended) The method according to claim 6, ~~[characterized in that]~~ wherein the etching treatment is carried out at a mean etching rate of not more than 3 $\mu\text{m}/\text{min}$.

12. (currently amended) The method according to claim 11, ~~[characterized in that]~~ wherein the mean etching rate is not more than 1 $\mu\text{m}/\text{min}$.

13. (currently amended) The method according to claim 11, ~~[characterized in that]~~ wherein the mean etching rate is not more than 0.1 $\mu\text{m}/\text{min}$.

14. (currently amended) A method ~~[Use of a quartz glass cylinder according to any one of the preceding claims 1 to 5]~~ for producing a preform for an optical fiber ~~[in an RIC method by]~~, the method comprising:

providing a quartz glass article according to claim 1;

collapsing the quartz glass cylinder onto a core rod; and ~~[by]~~

simultaneously elongating ~~[said]~~ the quartz glass cylinder ~~[with formation of]~~ so as to
produce the perform.

15. (currently amended) A method ~~[Use of a quartz glass cylinder according to any one of the preceding claims 1 to 5]~~ for producing an optical fiber ~~[in a RIC-ODD method by]~~, the method comprising the steps of:

providing the quartz glass article according to claim 1;

collapsing the quartz glass cylinder onto a core rod; and [by simultaneously]

elongating [~~said~~]the quartz glass cylinder [~~with formation of~~]to produce the optical fiber,

wherein the elongating step is carried out simultaneously with the collapsing step.

16. (New) The method according to claim 14, each of the plurality of cracks having depths of not more than 1.0 mm and widths of not more than 50 μm .

17. (New) The method according to claim 14, each of the plurality of cracks having depths of not more than 0.5 mm and widths of not more than 20 μm .

18. (New) The method according to claim 14, each of the plurality of cracks having depths of at least 30 μm and widths of not more than 5 μm .

19. (New) The method according to claim 14, wherein the quartz glass cylinder has an outer diameter of at least 150 mm.

20. (New) The method according to claim 15, each of the plurality of cracks having depths of not more than 1.0 mm and widths of not more than 50 μm .
21. (New) The method according to claim 15, each of the plurality of cracks having depths of not more than 0.5 mm and widths of not more than 20 μm .
22. (New) The method according to claim 15, each of the plurality of cracks having depths of at least 30 μm and widths of not more than 5 μm .
23. (New) The method according to claim 15, wherein the quartz glass cylinder has an outer diameter of at least 150 mm.